

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 33

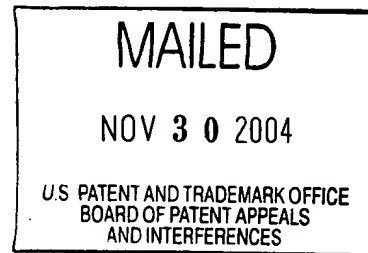
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HIEN D. MA and ARGYRIOS A. CHATZIPETROS

Appeal No. 2004-1297
Application No. 09/388/926

HEARD: November 17, 2004



Before KRASS, DIXON, and NAPPI, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1-20.

The invention pertains to deciphering recorded digital audio broadcast signals. In particular, a prepaid smart card is inserted into a play/record device for deciphering recorded encrypted audio signals which a user desires to hear. Monetary credits are deducted from the smart card, the encrypted digital audio signal is deciphered and the deciphered digital audio signal is recorded.

Representative independent claim 1 is reproduced as follows:

1. An apparatus for recording and playing a digital signal, comprising:

a receiver for receiving an encrypted digital signal comprising a digital audio radio service broadcast segment comprising auxiliary data operable to identify a beginning of said broadcast segment, said auxiliary data being embedded in said encrypted digital signal prior to said signal being received;

a buffer connected to said receiver for storing at least part of said digital signal as it is being received;

a recorder connected to said receiver for recording onto a first recording medium said encrypted digital signal in response to a user request if a beginning of said broadcast segment is in said buffer;

a player for playing said first recording medium and connected to a card reader; and

a card having a predetermined value for insertion into said card reader;

wherein when said card is inserted into said card reader, said card reader verifies that said predetermined value is at least a selected minimum value and authorizes said player to decipher said encrypted digital signal from said first recording medium and to record said deciphered signal onto one of said first recording medium and a second recording medium.

The examiner relies on the following references:

Park	5,757,909	May 26, 1998
Payton	5,790,935	Aug. 04, 1998
Iwamura	6,272,535	Aug. 07, 2001 (filed Jan. 30, 1997)
Stepp et al. (Stepp)	6,363,440	Mar. 26, 2002 (filed Nov. 13, 1998)

Reference is made to the briefs and answer for the respective positions of appellants and the examiner.

OPINION

In rejecting claims under 35 U.S.C. §103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason much stem from some teachings, suggestions or implications in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden

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is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re Hedges, 783 F.2d 1038, 1040, 228 USPQ 685, 687 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1051, 189 USPQ 143, 146-147 (CCPA 1976). Only those arguments actually made by appellant have been considered in this decision. Arguments which appellant could have made but chose not to make in the brief have not been considered and are deemed to be waived [see 37 CFR 1.192 (a)].

It is the examiner's position, enunciated at pages 3-4 of the answer, that Payton discloses the claimed invention but for a buffer connected to the receiver for determining whether the beginning of a signal is in the buffer and a recording of the signal if the beginning is present; a payment card; and the utilization of encryption keys and smart cards to decrypt signals.

The examiner cites Stepp for a buffer connected to the receiver for determining whether the beginning of a signal is in the buffer and a recording of the signal if the beginning is present. The examiner cites Iwamura for a teaching of a payment card and the deduction of a value from the card that stores monetary values. The examiner cites Park for a teaching of encryption keys and a smart card to decrypt digital signals transmitted to a user terminal.

The examiner concludes that it would have been obvious to combine the teachings of the four references so that users could record a program in its entirety from the beginning even though the decision to record the program occurs after the program starts and has been broadcast for a non-zero duration, and the user could pay for access with a smart card, while the digital data would be encrypted to prevent illegal or unauthorized usage (answer-page 5).

Appellants do not dispute much of the examiner's reasoning, but appellants do dispute the claim limitation of receiving a signal that already has embedded data operable to allow determination of the actual start time of a broadcast segment. Specifically, appellants argue that none of the cited references disclose "a receiver for receiving an encrypted digital signal comprising a digital audio radio service broadcast segment comprising auxiliary data operable to identify a beginning of said broadcast segment, said auxiliary data being embedded in said encrypted digital signal prior to said signal being received."

The examiner relies on Stepp for this specific limitation, specifically, column 4 of Stepp's disclosure. Lines 32 et. seq. of that column state that

An information signal may include information regarding the content of the information signal. For example, the time at which the information signal is initially broadcast (i.e. the start time) may be encoded into the information signal. Other information such as the length of the information signal, broadcast start time, title, etc. may also be encoded along with the information signal itself. The encoded information may be determined by receiver 210 . . .

It appears to us that a fair reading of the cited portion of Stepp would lead one to believe that Stepp does, indeed, teach "a receiver for receiving an encrypted digital signal . . . comprising auxiliary data operable to identify a beginning of said broadcast segment, said auxiliary data being embedded in said encrypted digital signal prior to said signal being received."

Appellant contends that Stepp teaches receiving a signal with embedded start time data, but teaches inserting the start time data *at the receiver*, rather than receiving a signal with auxiliary data operable to identify a start of a broadcast segment already embedded (reply brief-page 5). We disagree.

The cited portion of column 4 of Stepp indicates that the information signal may have the start time of the initial broadcast encoded therein. The encoded signal is shown as "INFORMATION" being input to receiver 210 in Stepp's Figure 2. Column 4, lines 38-40, of the reference then goes on to say that the "encoded information may be determined by receiver 210 by implementing appropriate decoding techniques." Clearly, then, the information, including the start time, is already encoded in the information signal *prior* to the time the information signal is input to the receiver 210 since the receiver 210 is to decode the information. Accordingly, it appears that appellants are in error when they assert that Stepp inserts the start time data *at the receiver*. From Stepp's description, at column 4, it would appear that the start time data is already inserted, or embedded, in the information signal, before it reaches the

receiver 210, receiver 210 merely decoding the information signal to be able to read the start time.

As broadly set forth in independent claims 1, 10 and 13, it is our view that Stepp does suggest the step/element of “a receiver for receiving an encrypted digital signal . . . comprising auxiliary data operable to identify a beginning of said broadcast segment, said auxiliary data being embedded in said encrypted digital signal prior to said signal being received.”

At pages 3-4 of the reply brief, appellants contend that even if Stepp teaches a signal having auxiliary data embedded prior to being received, which we so find, contrary to appellants’ position, the reference is still deficient in that it does not suggest that the data inserted into the signal represent the *actual* delineation between broadcast segments, as opposed to a mere “broadcast start time” or any other information not specifically tied to the *actual* change from one program segment to the next.

This argument is not persuasive since it is directed to subject matter which does not form any part of the instant claims. The claims do not make any distinction between an *actual* delineation, or change, between broadcast segments and “broadcast start time.” The claims do not recite “actual” at all and Stepp’s start time reads broadly on the claimed “beginning of said broadcast segment.”

Appellants also argue, referring to a Declaration under 37 CFR §1.132,

submitted with the Amendment After Final on April 1, 2003, that Stepp is intended for use with broadcast transmission signals, such as television signals, whereas the present invention is intended to work with specially designed DARS (digital audio radio service) signals. We agree with the examiner that Stepp clearly shows embedding data in television signals and that this, together with Payton's suggestion, at column 6, lines 20-25, of transmitting digital audio signals, would have led the artisan to employ Stepp's method of storing an information signal for subsequent recording to digital audio, as well as television, signals. The Declaration offers nothing to show any error in this reasoning or that even though the examiner has presented a prima facie case of obviousness, the instant claimed subject matter as a whole would not have been obvious because of some other showing (e.g., long-felt, but unsolved, need; commercial success, etc.) rebutting such a prima facie case.

We also do not agree with appellants' argument that the references are not combinable (pages 8-9 of the principal brief). The examiner has presented a reasonable case, in our view, and appellants have not convinced us of any error in the examiner's rationale. That is, the examiner finds that Payton teaches transmitting digital information to a user and, so, it would have been obvious to modify Payton by using the buffering system of Stepp since it allows received digital information to be recorded in its entirety from the beginning even though the decision to record the signals occurs after the start of the program. Additionally, in view of Iwamura's

disclosure of allowing users to pay a service provider for delivering digital information, the artisan would have found it obvious to cause a user to pay for receiving/recording the digital signals in Payton/Stepp. Further, both Payton and Iwamura suggest encrypting information signals to prevent unauthorized access to the digital information, leading skilled artisans to include such a feature in an overall system. Finally, in view of Park's method of decrypting digital signals transmitted to a user terminal using smart cards, the artisan would have found it obvious to have included such features into the overall system.

Again, appellants have offered us nothing convincing of any error in the examiner's rationale for the combination of references.

The only dependent claims argued by appellants are claims 14, 19 and 20. At page 3 of the reply brief, appellants argue that these claims relate to actions taken, or not taken, depending on whether the actual beginning of a broadcast segment can be determined. That is, appellants contend that this concept of performing a conditional act based on the actual start time being determined is separately patentable.

While this argument was presented for the first time in the reply brief and we do not have the benefit of the examiner's thoughts on this issue, it appears to us that, in accordance with the requirements of instant claim 14, the digital signals in Stepp will not be recorded if it is not stored in the memory device, i.e., the buffer. As to the idea, in claims 19 and 20, of not deducting monetary value from the smart card if the

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consumer is not given the entire broadcast segment, artisans would have found this obvious since a consumer should not be paying for less than a whole audio/visual recording.

Accordingly, we will sustain the examiner's rejection of claims 1-20 under 35 U.S.C. §103.

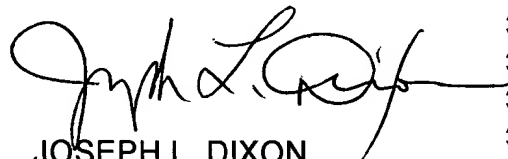
The examiner's decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a) (1) (iv).

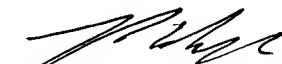
AFFIRMED



ERROL A. KRASS
Administrative Patent Judge



JOSEPH L. DIXON
Administrative Patent Judge



ROBERT E. NAPPI
Administrative Patent Judge

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ROYLANCE, ABRAMS, BERDO & GOODMAN, LLP
1300 19TH STREET, NW
SUITE 600
WASHINGTON, DC 20036-2680